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FOOD AND NUTRITION SUMMER INSTITUTE NEWSLETTER

LETTER FROM THE EDITOR

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Tamara Giles, student, Howard University in the foreground

his past year has been very exciting and most memorable for me as an intern with the Community Nutrition Research Group (CNRG). I had the opportunity to learn from and work along side: the Assistant Director for Nutrition Monitoring for the Beltsville Human Nutrition Research Center and Research Leader. Dr. Ellen Harris: Nutritionists, Dr. Paul Cotton and Dr. Shanthy Bowman; Home Economists, Annetta Cook and James Friday; Mathematical Statistician, Alvin Nowverl; and Program Support Assistant, Linda Nix. Each person helped me to develop professionally one way or the other. I actually participated in the daily activities of monitoring and assessing how the community meets its food and nutritional needs. I was a part of the support staff for developing and editing manuscripts and grants. I assisted with planning the reception for the Food and Nutrition Section at the American Public Health Association's 130th annual meeting. Lastly, I helped plan and conduct the 2003 Food and Nutrition Summer Institute (FNSI). Other responsibilities included analysis of food frequency surveys and analyzing food and nutrient data. The experience I gained helped me to land a new position with the Cooperative State Research, Education & Extension Service (CSREES) of the USDA. So, it's farewell to CNRG and hello to exciting new beginnings. Students don't forget to assert yourselves and seek internships that will help develop your career. It will pay off in the future!

......Dionne Toombs, Ph.D.

SUMMARY OF FNSI 2003

It is our duty as men and women to proceed as though limits to our ability do not exist.

~Teil hard de Chardin

rom Science to Action: Preparing the Nation for Health and Security" was the theme for FNSI 2003. This year's FNSI was held July 19-24 in Beltsville, Maryland and addressed the issues of diabetes and physical inactivity in the community. The Summer Institute focused on students designing year long projects. Group A and B included only students. Group A, 'Nutrition, Physical Activity, and Diabetes: A Community Model' focused on the community infrastructure and neighborhood characteristics with respect to:

- Opportunities for healthy eating, which are defined as food access (availability of grocery stores, restaurants, carry-outs, and fast-food places, farmers markets, and food pantries) and the types of food available through these outlets.
- Opportunities for physical activity, which are defined as access to facilities (parks, public recreational areas, swimming pools, school gyms, presence of side walks and bike-paths) and the types of physical activity available through these facilities (walking clubs, dance events, and youth sports) sponsored by local government, churches and other community based organizations.

Group B, 'Nutrition, Physical Activity and Diabetes: Investigating an Animal Model,' focused on animal models of diabetes with the use of the sand rat (Psammomys

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Roll Call of 2003 Summer Institute Participants



Alabama A& M University
Community Nutrition Research
Group, BHNRC, ARS, USDA
Families, 4H & Nutrition,
CSREES, USDA
Food & Drug Administration
Howard University
Indiana State University
Morgan State University
North Carolina Central University
Salish Kootenai College
Southern University and A & M
College
Tuskegee University
University of Arkansas at Pine



U.S. Army Research Lab

Weslyan College

"We must be the change agents to improve our communities nutrition related outcomes"

- Dr. James Dula

Summary of FNSI (cont'd from page 1)

obesus). The unique characteristic of the sand rat is the manifestation of diabetes mellitus when fed normal rodent chow. Thus, the students in this group addressed various areas of research topics to improve the animal health status.



Group C, 'Health and Security: Documenting the 2003 Summer Institute Project' was composed of faculty from the participating HBCUs. This group focused on how the faculty will monitor, document and report the progress of the year long projects.

In the words of **Jeffrey Brown**, a summer USDA intern and a Nutrition/Dietetics graduate student at Indiana State University, "I had a wonderful time at the FNSI. It was one of the best conferences I have ever attended in my life. It was very rewarding to be around a group of diverse people who are actively trying to save their communities from diet related diseases. The conference opened with a reception/dinner and ended with a concise plan to fight diabetes in America. I have never attended a conference where people are so eager to help their communities fight diabetes. As an African American male attending a majority institution it was good to see other African Americans and Native Americans from Historically Black Colleges and Universities and Tribal Colleges, using their school communities to fight diabetes. I want to wish all participants the best of luck in their research endeavors. I am glad I was able to take part in such an experience."

There were 60 Summer Institute participants that included faculty and students from Alabama A & M University, Howard University, Indiana State University, Morgan State University, North Carolina Central University, Salish Kootenai College, Southern University and A & M College, Tuskegee University, University of Arkansas at Pine Bluff, and Weslyan College. Representatives from the USDA (ARS, CSREES), U.S. Army Research Lab, and FDA also participated. Each day of the FNSI was filled with exciting activities and working sessions. **Saturday, July 19,** a reception and dinner was held and everyone had the opportunity to meet and greet each other.

Sunday, July 20, a spirit filled workshop, "Health and Security for the Spirit and Body" with dynamic guest speaker, Rev. Patricia Lawson of the Riverside Church, New York, NY was held at the Howard University, Dunbarton Chapel.

Monday, July 21, Dr. Ellen Harris opened the FNSI with a welcome, introductions, and program overview. The opening speaker, Dr. James A. Dula, Deputy Chief Administrative Officer for Health and Human Services, Prince George's County, Maryland spoke on returning to the grassroots, and taking our families 'back to the porch,' to foster family relationships and communication in a setting as once done on the porches in the south. "We must be the change agents," Dr. Dula stated, "to improve our communities nutrition related outcomes."

Later that morning, several presentations were made. Dr. V. Michelle Chenault, Office of Science and Technology, FDA presented, "Overview of the Etiology, Pathobiology, and Treatment of Diabetes". Dr. V. Grayson CuQlock-Knopp, Human Research & Engineering Directorate, U.S. Army Research Lab spoke on "Human Factors Design." Dr. Dionne Toombs, CNRG, USDA presented "Effects of Physical Inactivity on Health" and Dr. Paul Cotton, CNRG, USDA presented "Nutrition and Physical Activity Assessment." The lunch speaker, Dr. Tonya Smith Jackson, Asst. Professor, Human







Representative A. Hastings



Representative D. K. Davis

Summary of FNSI (cont'd from page 2)

Factors Engineering, Virginia Polytechnic Institute and State University, spoke on the "Use of Human Subjects in Research & Interview Techniques."

Demonstration sessions were held in the afternoon by the Food Surveys Research Group and the Nutrient Data Lab, BHNRC, USDA, on the automated dietary intake interview for national food consumption surveys and the PC and PDA applications to access the National Nutrient Database, respectively. The working group sessions were launched in the late afternoon. Group A was exposed to the Community Nutrition Mapping Project with Mathematical Statistician, Alvin Nowverl of CNRG. In this session the participants had a "hands on" mapping exercise.

On Tuesday, July 22, the visit to Capitol Hill to meet U.S. Congressional Representatives and get their perspective on health and security took place. The representatives in attendance included: Donna Christian-Christensen, Delegate, US Virgin Islands; Alcee Hastings, Florida's 23rd District; and Danny K. Davis, 7th District of Illinois. You could really see the passion and concern each representative has for his/her district and the nation. The University of Arkansas at Pine Bluff participants also learned that Representative Davis was an alumni. Following the Capitol Hill



visit we traveled to the George Washington Carver Building in Beltsville for lunch. 'Power walks' were built into the afternoon schedule to promote physical activity.

Wednesday, July 23, started with a visit to Aberdeen Proving Grounds, Aberdeen, MD. This trip was especially informative and exciting. Each demonstration was like an adventure in the Army training fields. We shot M-16 rifles in the Shooter Stimulator Facility. We received the same stress test that is administered to soldiers in the field. We observed night vision research (Dr. G. CuQlock-Knopp's lab) in 3-D and auditory research in 3-D. We later had a tasty lunch at the Top of the Bay restaurant overlooking the Potomac River.

Of course, after a delicious filling meal we all slept on the bus ride back to Beltsville. The rest of the afternoon was filled with a power walk and preparations for group presentations. Group B also had the opportunity to visit the FDA animal facility in Rockville, Maryland (Dr. Chenalt's lab) where the sand rats are housed. Wow... what a day!

On Thursday, July 24, each group presented the design for their year long projects. The students in Group A were Tamara Giles, Howard University; Andrea Morris, Alabama A & M University; Lisa Thomas, Cheryl Savior, Dana Avison, Toni Zwaryck-Denny, and Jeff McAtee, Salish Kootenai College; Tiffany Williams and Tameka Hampton, Southern University and A & M College; Ezim Onyema and Sylvia Dorsey, University of Arkansas at Pine Bluff; Jeffrey Brown, Indiana State University; Jennifer Smoot and Rachel Weatherless, Morgan State University; and Stanley Fairfax, Archbishop Carroll Catholic High School. Njeri Ngaine, NDL, USDA also participated. Drs. Dionne Toombs and Paul Cotton served as facilitators for the group. The project plan for this group was to determine the accessibility of nutritious foods and physical activity in their university community in order to prevent diabetes or help those with the disease. The students in Group B were Judith Anglin, Chesney Blue, Reynolette Ettienne, Avis Graham, and Tiffanie Nowlin, Howard University; Maya Jefferson and Ashley Thompson, Morgan State University;

(Continued on page 4)

Summary of FNSI (cont'd from page 3)

and Weslyan College student, Natasha Soodoo. Their project plans included examining a diet to prevent the occurrence of diabetes in the sand rats; biochemical and physiological effects of physical activity on the sand rats' health; mimicking the natural environment of the *Psammomys Obesus* to promote physical activity; an investigation of red blood cell half life in the sand rat; testing the reversibility of diabetes in sand rats; and examining the behavior of *Psammomys Obesus* and determining why this animal model is a major contributor in the research of diabetes. Drs. Michelle Chenault and Grayson CuQlock-Knopp were the group facilitators.

Group C included the faculty of the HBCUs: Eleanora Isles, Enid Knight and Thelma Baker, Howard University; Donnie Cook, Alabama A & M University; Esther Okeiyi, North Carolina Central University; Beatrice Phillips, Elaine Bromfield, and Adelia Bovell-Benjamin, Tuskegee University; Glenda Johnson, Southern University and A & M College; Lucille Meadows and Bonnie Bradley, University of Arkansas at Pine Bluff; and participants, Marlene Afton and Dawn Turner from the Pennington Research Center and Edith Whitaker from North Carolina. Drs. Ellen Harris and Gladys Gary Vaughn were the facilitators for this group.

Congratulations to everyone for a job well done! The day ended with a closing lunch and farewells until FNSI 2004.

PARTICIPANTS OF THE FNSI 2003



SUMMER INSTITUTE PHOTO GALLERY



Dr. Grayson CuQlock-Knopp, U.S. Army Research Lab. and Co-Sponsor of FNSI 2003 $\,$



Salish Kootenai College students, Cheryl Savior, Toni Zwaryck-Denny and Jeff McAtee



Samia Ibrahim, student, and Elaine Bromfield, Instructor, Tuskegee University



Rep. Davis and Esther Okeiyi, Professor, North Carolina Central University



Tiffany Williams and Tameka Hampton , students, Southern University and Andrea Morris, student, Alabama A&M University



Lucille Meadows, Bonnie Bradley, Instructors, University of Arkansas at Pine Bluff and Beatrice Phillips, Professor, Tuskegee University

HEALTHY EATING RECIPE

Seafood Stew

Ingredients- serves 10

6 cups water

10 oz. white wine

3 celery stalks, chopped

1 pound large shrimp, washed

1 pound crayfish

2 tablespoons olive oil

2 medium onions, chopped

1 medium red pepper, chopped

1 medium green bell pepper, chopped

4 medium tomatoes, chopped

2 tablespoons tomato paste

2 teaspoons tomato paste

2 teaspoons chopped fresh oregano

1 pound sea bass, cut into chunks 1 pound small squid, cleaned and sliced

Salt and pepper to taste

Procedure:

In a large, non-aluminum saucepan, stir together the water, white wine, celery, and carrots. Bring to a simmer for 3 to 4 minutes. Strain the shellfish and vegetables form the broth and set the broth aside. Peel the crayfish and shrimp and discard the shells.

Warm the olive oil in the large saucepan over medium-high heat.

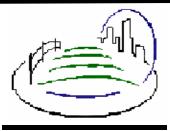
Cook the onions and peppers until tender, about 6 minutes. Stir in the tomatoes, tomato paste, thyme and oregano. Add the reserved broth and bring to a simmer. Stir in the sea bass and squid and simmer for 2 minutes. Return the crayfish, shrimp and vegetables to the broth and simmer for 1 more minute. Season to taste and serve.

Source: Recipe and Meal Planner Guide, National Diabetes and Education Program, National Institutes of Health and the Centers for Disease Control and Prevention.

Newsletter Design & Layout: Drs. Ellen Harris and Dionne Toombs, and Linda Nix







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cnrg/fnsi

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